

Peggotty Beach Retreat Feasibility Study



Metropolitan Area Planning Council
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INTRODUCTION

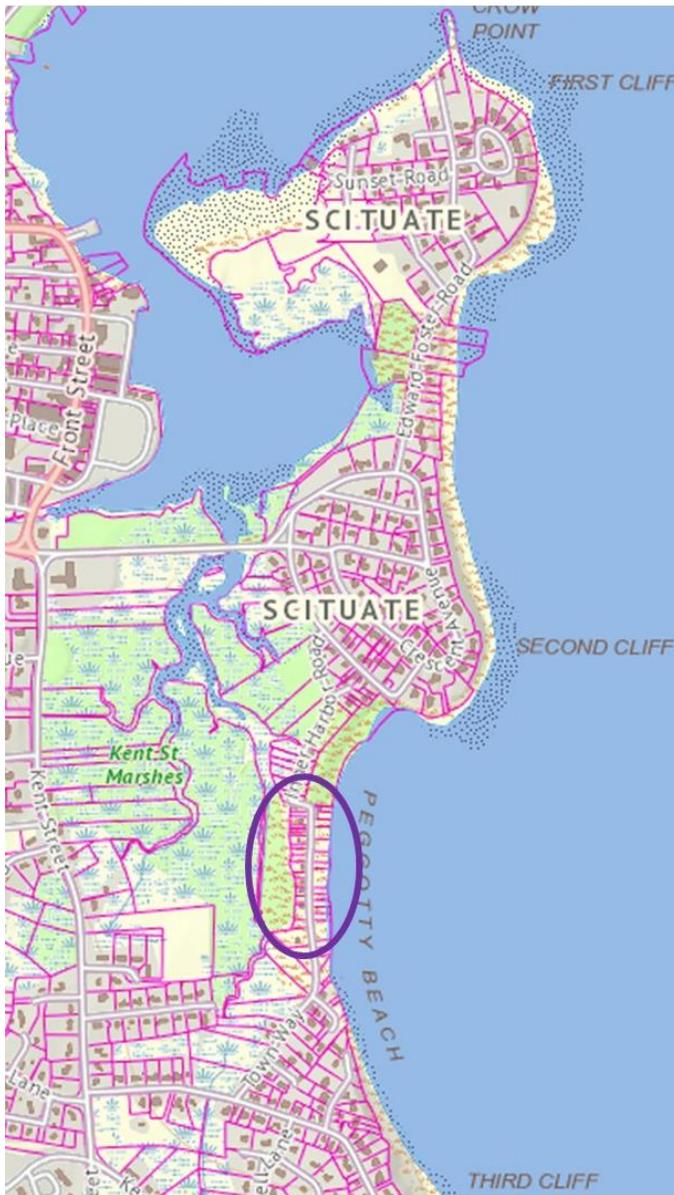
This report focuses on a small seasonal cottage community located on Town Way Extension at Peggotty Beach in Scituate, Massachusetts. Peggotty Beach is a 400-foot wide barrier beach; it lies between the Atlantic Ocean to the east and the Kent Street salt marsh to the west. Town Way Extension, a dead-end road, extends 1,200 feet along the beach. Where there was once a thriving seasonal cottage community of more than thirty residences, today there are ten remaining seasonal homes. Most of the rest of the vacant lots are now owned by the Town of Scituate as a result of buyouts by the federal government that occurred after storms in 1978 and in the early 1990's. In recent decades storms have necessitated the relocation of the water line, the road, and utility poles, to the west side of the cottages. The road is no longer paved and must be regraded each spring in order to provide access for the residents.

The residents are acutely aware of their vulnerability to northeast storms and rising seas. Over the years, all but one of the homes has been elevated. The single home that was not elevated was substantially damaged during a March 2018 northeaster and, if replaced or rebuilt, elevation on pilings will be required. Several of the other homes were also damaged in 2018. This project was initiated by Town Way Extension residents who requested that the Town of Scituate explore the feasibility of a land swap, or other arrangement, that would allow residents to relocate to the town parcel that extends along most of the western edge of the barrier beach.

The town parcel (Property #0 in Figure 1) shares the characteristics of the other privately owned parcels, that is, barrier beach, coastal dune, and its location on the Flood Insurance Rate Map (FIRM) in a Velocity Zone (elevation 17). During significant storms the town parcel is also subject to flooding as overwash engulfs the barrier beach. Nevertheless, the town parcel would provide better protection than the current location of the homes as it is at higher elevation and removed from the first impact of breaking waves. Residents hope that relocation will not only provide for greater safety, but also extend the time that Peggotty Beach is a viable location for summer habitation. Relocation of the homes could also provide Scituate residents with expanded public access to the town's primary public sandy beach.

The following sections of the report summarize the interviews with residents and, investigate options, challenges, and alternatives for a land swap. As the report details, our investigation has identified a series of significant and complex obstacles to a completing a land swap. As many of the obstacles are interrelated, strategies to address them and suggested next steps are in the concluding Discussion and Recommendations section.

Figure 1: Focus Area



Peggotty Beach and surrounding area



Town Way Extension Study Area

RESIDENT PERSPECTIVES

Eight of the ten property owners on Town Way Extension participated in interviews for this project. The other two owners attended an update session for residents in early December. In addition, two residents of the adjacent Inner Harbor Road shared their perspectives. Many common themes, detailed below, emerged from the interviews with Town Way Extension residents and family members.

Love for the beach

All the residents expressed their deep love for the beach. For most, summers at Peggotty Beach are an experience that has been shared with family across generations. More than one expressed a desire to honor their parents' wishes for the property, and most have a strong desire for their children and grandchildren to enjoy the beach as they have. Residents also noted their long-standing connections and friendships with each other. No one expressed any interest in exploring relocation options elsewhere in Scituate. All have primary homes; most are nearby in metro Boston. One family commented that if remaining at Peggotty Beach was no longer an option, they would need to find a beach location in another community. Several mentioned that if it were possible, they would want to extend their time at Peggotty Beach in the spring and/or the fall.

Changes in the beach

Residents noted the daily and annual changes in the beach, as well as the changes that have occurred over time. Within their collective memories, the changes are quite dramatic. Many residents recalled that the beach used to have a cobble dune between the cottages and the ocean, and that it was large enough that the ocean was only visible from the second floor of the cottages. One noted that the vertical distance between the floor of the cottage and the sand has grown by many feet over the years. Another observed that the road is four feet higher just since 2018. Finally, one resident indicated that the salt marsh used to be within fifteen feet of the cottage door – now it is more than 150 feet away.

There was strong agreement that armoring of Second and Third Cliffs by the Army Corps of Engineers years ago is a primary source of erosion and increased storm damage at Peggotty Beach. Most attributed the impacts to the loss of a sand source; others also suggested that the revetments funnel water onto the beach. At least one resident indicated that the Town had added to the armoring of the cliffs, contributing to additional storm damage.

Mutual benefits

Many of the residents commented that relocating the homes is a mutually beneficial proposition. The town would gain land on the water that could create additional space and access to Peggotty Beach for town residents. Others suggested that perhaps residents could focus relocation on the northern end of the town parcel, providing better protection for the homes and more unfettered open space along the southern stretch of the beach for town residents. Also noted was that relocating the homes would provide continued property tax income to the town. Finally, many residents referenced the vulnerability of the Front Street area to flooding. They highlight that it is the town's economic engine and wondered whether the town is doing enough to protect it. Many view Peggotty Beach as a future flood pathway to Front Street and suggested that moving homes landward would provide more opportunity for the town to implement strategies to prevent overwash.

Tensions with the town

Most residents referenced a long legacy of significant tensions with town. One resident likened the relationship with the town to an abusive relationship to be avoided at all costs. Many voiced dissatisfaction with the transfer of responsibility for the road to residents, others felt the town had unfairly pressured residents to accept buyouts in the 90's. Residents expressed the opinion that the town changes the rules regarding septic, foundation, and other issues, arbitrarily. Most commented that they receive or use few services from the town (schools, trash, road maintenance) relative to their property tax payments.

There is strong interest in having the town extend the sewer line to the homes on Town Way Extension. Several indicated they believe that difficulties maintaining septic systems pose the greatest immediate risk to homes at Peggotty Beach. Residents expressed great frustration that the town has been unwilling to extend sewer service.

A few residents did mention their appreciation of specific town staff who had been helpful with permitting issues. Quite a few also indicated that they believe the relationship with the town is better now than in the past. Residents were appreciative of the town's willingness to investigate relocating homes on Peggotty Beach.

A desire for certainty

Several residents expressed a desire for certainty regarding the requirements of a land swap. They would like to the town to spell out the requirements so that they can consider relocation with full knowledge of costs, building requirements, and the like.

Expectations for the future

Residents are acutely aware of their vulnerability to ocean storms. Even residents who feel their homes are currently relatively protected expect their status will change over time. Many residents relayed that they close their homes for the winter with great foreboding that they will not survive upcoming winter storms. With relocation, resident estimates of the time they might gain ranged from ten, to 30 to 50 years. No one expressed the sentiment that homes would be viable on Peggotty Beach into the indefinite future.

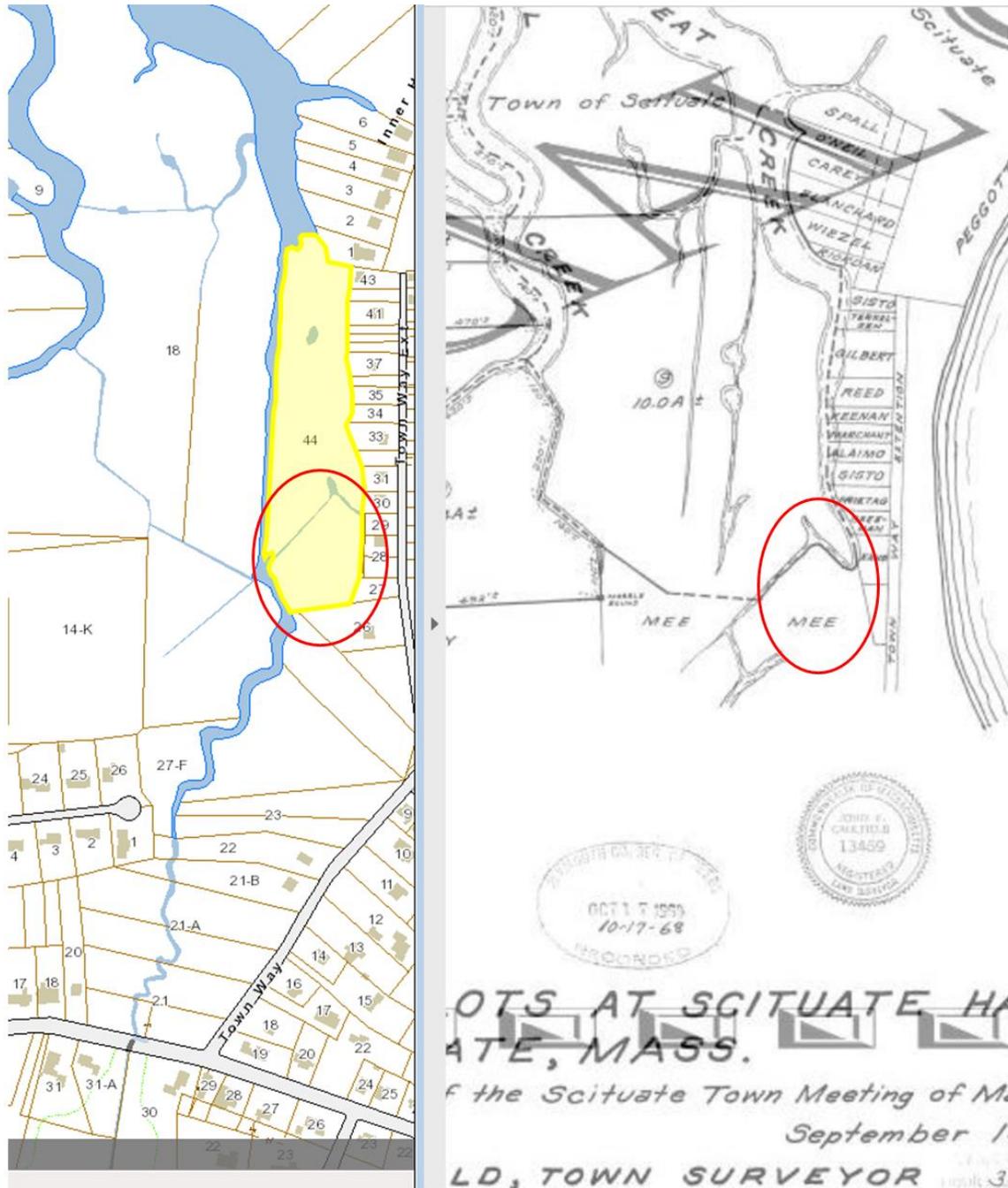
Alternate options

Residents expressed a variety of views about their options in the event a land swap does not occur. Scenarios included an interest buyout options; selling the property; elevating and relocating the home within the current parcel and; remaining in place as long as possible, perhaps receiving flood insurance payment and selling the land to the town at the time of a catastrophic storm.

ESTABLISHING OWNERSHIP AND PARCEL BOUNDARIES

The town parcel in question was transferred to town ownership as a result of a Town Meeting vote in 1968. MAPC reviewed the map associated with the 1968 Town Meeting transfer and traced parcel histories through the Plymouth County Registry of Deeds to the extent possible. A parcel

Figure 2: Current and historic parcels



Current Scituate Assessor Map

Map referenced in 1968 Town Meeting vote

identified in the land transfer as #9 appears to include most of the land identified as the current parcel (55-6-44), but also much more land to the west, and potentially not all of what is identified as the current parcel. It appears that the current town parcel may include some land at the southern end of the parcel, identified as owned by “Mee” that was not included in the parcels identified for purchase as shown on the map referenced in the 1968 Town Meeting vote (Figure 2).

Staff in the Scituate Assessor Department assisted with title search efforts but were unable to locate the records of transfer of the Mee property to the Town of Scituate. At time of purchase, #9 was identified as 10 acres +/- . Currently the size of parcel 55-6-44 is listed as 5 acres on the Assessor Card. Much of the western area of the parcel identified as #9 is now part of 55-5-18, owned by the Town of Scituate, which includes other land that was part of the 1968 transfer.

If the town and the residents choose to move forward, a necessary first step will be a title search and property survey to establish the lot boundaries and town ownership. Also recommended is a title search for all the private properties involved to confirm ownership, and identify any liens, mortgages, or other interest in the properties. A challenge in reviewing the properties is that the landscape and location of the beach and marsh have changed significantly over the years. Older deeds tend to identify lot boundaries with references that may not exist today.

LAND TRANSFER OPTIONS

Town Parcel

In 1968, Scituate Town Meeting approved the purchase, or taking by eminent domain, a series of properties including Parcel 55-6-44. Article 62, which passed by a vote of 304-2, approved raising and appropriating \$15,000 to acquire the properties “for recreation and conservation purposes”. Because the land was purchased for recreation and conservation purposes, it is protected under Article 97 of the Amendments to the Massachusetts Constitution. Under Article 97, changes in the use or disposition of lands protected by Article 97 requires a two-thirds vote of both houses of the legislature.

In February 1998 the Executive Office of Environmental Affairs (now Executive Office of Energy and Environmental Affairs, EOEEA) adopted an “Article 97 Land Disposition Policy”. The policy acknowledges that the legislature can dispose of Article 97 land without the consent of the agency but seeks to minimize such occurrences. The policy states that EOEEA will recommend that the Governor veto legislation if EOEEA disapproves of the disposition. Municipalities that propose, advocate, support, or complete disposition of Article 97 land without following the EOEEA policy will not be eligible for grants offered by EOEEA and its agencies. The policy limits EOEEA support of requests to cases where they determine exceptional circumstances exist.

Among the requirements of the EOEEA policy are the granting of “real estate of equal or greater fair market value or value in use of proposed use, whichever is greater...” to the disposing agency

or its designee. The policy also requires unanimous support of the Conservation Commission and a two-thirds vote of Town Meeting. A link to the policy is provided in the Resources section of this document.

To achieve EOEEA support for legislative approval to remove the town land from Article 97 protection, the current privately owned properties would likely need to be accepted as real estate of equal or greater fair market value. Those properties would presumably receive Article 97 protection for conservation and recreation. In addition, conversion of land protected under Article 97 requires the filing of an Environmental Impact Report under the Massachusetts Environmental Policy Act (301 CMR 11.03 (1) (a) 3.).

Land Swap Options

Massachusetts General Law Chapter 30B governs municipal acquisition and disposition of real property of greater value than \$35,000. Its purposes include promoting competition and fairness. While there are circumstances when a municipality can target a specific parcel for purchase (e.g. adding to existing conservation land), the law does not allow land swaps. A solution that other communities have successfully pursued is to seek special legislation to authorize a swap. To initiate the process, a Town Meeting vote to petition the legislature to enact legislation authorizing the town and residents to swap land would be required.

Eminent domain may be another option for exchanging the properties. Eminent domain takings need to be for a public purpose and provide fair market value for the property taken. A public purpose in this case could be the expansion of the town public beach. Eminent domain takings must be authorized by Town Meeting. A two-thirds vote is required when the action involves the appropriation of money. In a possible scenario, the town could offer title to one of the subdivided lots on town property to satisfy all or part of the fair market value. It is possible to structure a voluntary eminent domain agreement in advance. In this case, it would likely need to be subject to state approval for removal of town land from Article 97 protection. Eminent domain may be a speedier option than seeking special legislation and will clear any outstanding title issues that may exist.

STATUS OF TOWN WAY EXTENSION

Records indicate that Town Way Extension was adopted as a public way by a vote of Town Meeting in 1974. Erosion and storms caused repeated damage to the road over the years. In 2013 storms again destroyed the road as well as the utility poles. At that time the utility poles and the road were relocated to the west side of the homes.

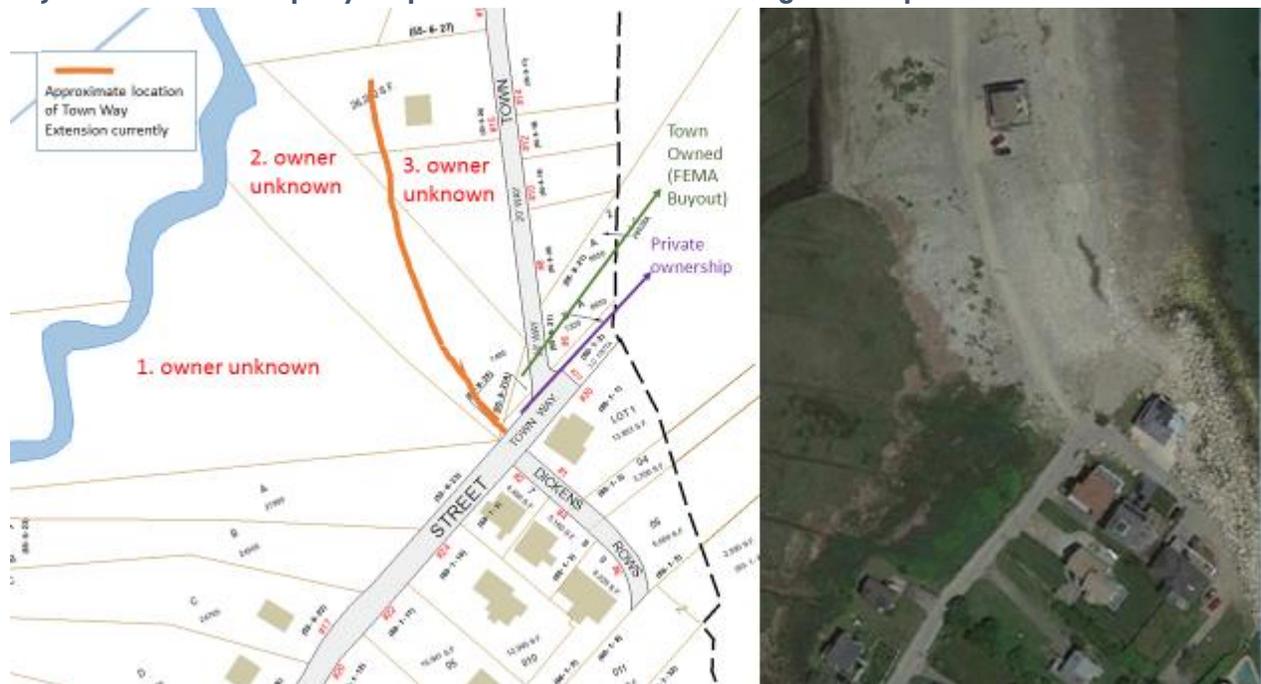
As MAPC understands it, in the current arrangement dating to 2013, the residents hire a private contractor to regrade the road, now located west of all the homes, each summer season; the Town contributes some funds related to their ownership of parcels along Town Way Extension. MAPC

understands that no formal action has been taken regarding the status of the public way. Investigation for this project has surfaced challenges related to the current location of Town Way Extension. These include conflicts with private property, FEMA deed restrictions, and Article 97 status.

Private Property

The road in its location west of the properties appears to cross one or more parcels for which the Assessor Department does not have ownership information (shown as owner unknown in Figure 3 below), and one or two additional privately owned parcels. Figure 3 shows the town GIS parcel map and a Google Map image from June 2019. Town Way Extension is drawn in its approximate location on the parcel map. Possible conflicts include the three owner unknown properties and parcels 55-6-25 and 55-6-26.

Figure 3: Scituate Property Map with annotations and Google Earth photo



A title search would be required to find records for the properties for which the town does not have ownership records. If ownership still cannot be ascertained, Town Meeting can authorize an eminent domain taking. If the Town can make a case that a property has been treated and used as public property, it may also have the option to pursue civil action in court to establish title. If owners are identified, Town Meeting can authorize the purchase of an easement, purchase of the properties or, an eminent domain taking with reasonable compensation to the owners. Similarly, with Town Meeting approval, the town could pursue easement, purchase, or eminent domain options with the known property owners.

FEMA Deed Restrictions

All the town-owned properties that were transferred through FEMA buyouts have deed restrictions that limit use to public and open space purposes. Title research indicates that many properties on the west side of Town Way Extension including numbers 17, 29, 33, 37, 45, and 55-8-21A, have deed restrictions as a result of FEMA buyouts.

An example of the FEMA deed restriction language for 35 Town Way Extension is shown below:

“This conveyance is made with the express condition that:

1. The premises shall only be used for purposes consistent with sound land management and use, as that term is defined in Title 44, Code of Federal Regulations, part 77, as it now appears or may hereafter be amended;
2. The premises shall only be used for public purposes;
3. The premises shall only be used for open space purposes; and
4. There shall not be erected on the premises any structures or other improvements, unless such structures (restrooms excepted) are open on all sides and are functionally related to open space use.

Any breach or threatened breach of the above conditions may be enjoined upon application by the United States of America. In addition, the Director, Federal Emergency Management Agency or his successor, shall have the option to repurchase the above described premises for the sum of One Dollar (\$1.00), if the Grantee, its successors or assigns shall have failed to remove or correct any violation, of the above conditions within thirty (30) days after the mailing of written notice thereof by said Director or his successor, to the Grantee, its successors or assigns.

The above conditions and restrictions, along with the right to enforce same are deemed to be covenants running with the land in perpetuity and are binding on subsequent successors, grantees or assigns.

The Grantor releases and quitclaims unto the Grantee and its assigns, all right, title, and interest which Grantor may have in the banks, bed and waters opposite to or fronting upon said land, right-of-way abutting or adjoining said lands, and in any means of ingress and egress appurtenant thereto.

To have to hold the said premises with all and singular the rights and privileges thereunto belonging unto the said Grantee and its assigns forever.

This conveyance is expressly subject to rights outstanding in third parties for existing easements for public roads and highways, public utilities, railroads and pipelines.”

Unpaved access roads may be allowed, but only to serve conservation purposes. FEMA guidance requires that “Modifications to the language in the FEMA Model Deed Restriction can only be made with prior approval from the FEMA Office of Chief Counsel through the appropriate FEMA Regional Office”¹.

Figure 4 below highlights the town Chapter 97 property in yellow and identifies properties for which FEMA deed restrictions have been reviewed by MAPC with a red star. MAPC believes it is likely that all the town-owned properties have FEMA deed restrictions.

¹ Federal Emergency Management Agency, Hazard Mitigation Assistance Guidance Addendum, February 27, 2015, p.8

Figure 4: FEMA Deed Restrictions



Article 97

As discussed above, town parcel 55-6-44, is protected for conservation and recreation purposes under Article 97 of the Massachusetts Constitution. It appears likely the road crosses this parcel.

A title search and land survey of the properties will be required to determine the location of the current road and any conflicts with private and restricted use parcels.

PERMITTING REQUIREMENTS

Permitting requirements also present challenges to implementing a swap of the properties. Perhaps the greatest impediment is that the town property is located in the same sensitive and regulated areas (barrier beach, coastal dune, FEMA Velocity flood zone) as the current homes. Many of the relevant state and local regulations allow actions related to existing structures that are not permissible for new construction.

SCITUATE FLOOD PLAIN AND WATERSHED PROTECTION DISTRICT (Article 470)

The current and proposed locations of the residential properties are within the Town of Scituate Flood Plain and Watershed Protection District. Section 470.5 of the bylaw provides that within the district “no structure, shall be erected, constructed, altered, enlarged or otherwise placed or moved for any purpose...” Exemptions to the language are not relevant to single family homes.

Under Section 470.8, repair or improvement of structures that legally existed on March 2, 1992 are exempt from the requirements of the district if they are deemed not to be substantial improvement and if they are consistent with the purposes of the district. Section 470.6 F provides that for substantial improvement of a structure which legally existed on March 2, 1992, a special permit may be issued if the improvements are consistent with the National Flood Insurance Program, and with the State Building Code pertaining to flood resistant construction, and do not affect natural drainage patterns. Section 470.6 F has made possible the elevation of existing structures at Peggotty Beach.

However, relocating to a new parcel such as the adjacent town parcel is not allowed under the language of Section 470.5. Section 470.9 does provide the possibility of proving to the satisfaction of the Board of Appeals that land within the district is not subject to flooding and not unsuitable because of drainage conditions. Given the location within the Velocity zone and the known overwash flooding that has occurred during northeast storms, this is not a realistic option. Another avenue of recourse to this prohibition would be a two-thirds vote at Town Meeting to change the bylaw language or its application to this location.

STATE AND LOCAL WETLANDS REGULATIONS

Scituate has a local wetlands bylaw in addition to the state Wetlands Protection Act. The regulations for the bylaw are in Section 30770. Projects are reviewed by the local Conservation Commission. Decisions of the local Commission can be appealed to the state Department of

Environmental Protection. Decisions under the local bylaw must be appealed to Superior Court. Wetlands permits must be considered based on an actual application, as such it is not possible to say definitively whether a permit for relocation would be issued. Relevant wetland resource areas include Land Subject to Coastal Storm Flowage (Velocity zone), Barrier Beach, Coastal Dune, and buffer to Salt Marsh.

There are stringent protections in place for Coastal Dunes because of their significance for storm damage protection and flood control. State regulations for coastal dunes establish a high bar, requiring that projects shall have no adverse effect on their functioning as shown in 310 CMR 10.28 (3) below. The Scituate local bylaw essentially mirrors this language.

- (3) Any alteration of, or structure on, a coastal dune or within 100 feet of a coastal dune shall not have an adverse effect on the coastal dune by:
 - (a) affecting the ability of waves to remove sand from the dune;
 - (b) disturbing the vegetative cover so as to destabilize the dune;
 - (c) causing any modification of the dune form that would increase the potential for storm or flood damage;
 - (d) interfering with the landward or lateral movement of the dune;
 - (e) causing removal of sand from the dune artificially; or
 - (f) interfering with mapped or otherwise identified bird nesting habitat.

The Massachusetts Department of Environmental Protection (MA DEP) has found that there are circumstances where homes on driven pilings can meet the above requirements. Requirements for a roadway have the potential to pose a greater challenge.

Other notable language in the Scituate bylaw relates to Land Subject to Coastal Storm Flowage (LSCSF). Performance standards in Section 10.38 require that relative sea level rise and landward migration be incorporated into the design and construction of structures. Presumably the Commission will need to take into account the combined effects of erosion rates and sea level rise in this location. Notably, performance standard (d) (2) prohibits “new or proposed expansions of roads, driveways or parking lots, or impermeable paving for existing unpaved roads, driveways or parking lots”.

The Scituate local bylaw also has language in section 10.03 that pertains to waste disposal.

(2) (b) (1) includes the following: “To ensure protection of all other interests of the bylaw, no new or substantially enlarged septic system shall be allowed in FEMA VE, AO and floodway areas where there is actively shifting sand (i.e., barrier beaches and dunes).”

(2) (b) (2) includes: “A new mounded septic system, although permitted under Title V, shall not be permitted in a FEMA VE- or AO-zone or floodway area”.

(2) (b) (3) allow an exception for existing dwellings: “Where there is an existing dwelling, septic systems may be up-graded and/or improved, including mounded systems, where otherwise they would not be permitted.”

Other language that will likely be relevant includes the following:

10.05 (10) Buffer Strip. Although allowing for the possibility of an exception, the language requires an undisturbed 50-foot vegetated buffer strip along the edge of the salt marsh. This will need to be considered when assessing the available space on the parcel.

10.12 (d) requires that subdivision proposals minimize flood damage.

STATE TITLE V REQUIREMENTS

Septic system installation requirements are regulated by 310 CMR 15.00, commonly known as Title 5. Under the regulations, approval of system occurs at the local level with the Health Department. The regulations allow installation of septic systems on a barrier beach and dune only as a replacement to systems that were in existence on March 31, 1995. The relevant language is as follows:

15.213: Construction in Velocity Zones and Floodways

(1) No septic tank or humus/composting toilet shall be constructed in a velocity zone on a coastal beach, barrier beach, or dune, or in a regulatory floodway, except a septic tank that replaces a tank in existence on the site as of March 31, 1995 that has been damaged, removed or destroyed, where placement of the tank outside of the velocity zone or regulatory floodway, either horizontally or vertically, is not feasible. Where reconstruction of a system in existence on March 31, 1995 occurs or reconstruction of a building or buildings is allowed in accordance with the Wetlands Protection Act and 310 CMR 10.00: *Wetlands Protection*, it shall be presumed to be feasible to elevate the tank if the building is elevated above the velocity zone or regulatory floodway.

(2) No soil absorption system shall be constructed in a velocity zone on a coastal beach, barrier beach, or dune, or in a regulatory floodway, unless

(a) the system is to serve a building or buildings that were in existence on March 31, 1995 or reconstruction of such building or buildings where allowed in accordance with the Wetlands Protection Act, M.G.L. c. 140, § 131 and its implementing regulations as 310 CMR 10.00: *Wetlands Protection*;

(b) there is no increase in design flow from such building or buildings;

(c) no connection to a public sewer or shared system is available;

(d) the owner or applicant cannot site the system elsewhere;

(e) the septic tank or humus/composting toilet is sited outside of the velocity zone or regulatory floodway, either horizontally or vertically;

(f) the system achieves separation from high groundwater elevation as required by 310 CMR 15.212; and

(g) any portion of the soil absorption system that is within the velocity zone or regulatory floodway is a leaching bed or trench system or any other system constructed in accordance with the Wetlands Protection Act and 310 CMR 10.00: *Wetlands Protection*.

While there is a process to request a variance, the standards for new construction, are likely prohibitive.

15.410: Variances - Standard of Review

(1) Local Approving Authorities and the Department may vary the application of any provisions of 310 CMR 15.000 with respect to any particular case except those listed in 310 CMR 15.415. Variances for increased flow to existing systems shall be governed by the provisions of 310 CMR 15.414. Variances for schools shall be governed by the provisions of 310 CMR 15.416. Variances shall be granted only when, in the opinion of the Approving Authority:

(a) The person requesting a variance has established that enforcement of the provision of 310 CMR 15.000 from which a variance is sought would be manifestly unjust, considering all the relevant facts and circumstances of the individual case; and

(b) The person requesting a variance has established that a level of environmental protection that is at least equivalent to that provided under 310 CMR 15.000 can be achieved without strict application of the provision of 310 CMR 15.000 from which a variance is sought.

(2) With regard to variances for new construction, enforcement of the provision from which a variance is sought must be shown to deprive the applicant of substantially all beneficial use of the subject property in order to be manifestly unjust.

Salt marsh setbacks also apply, they include 25 feet for a tank, 50 feet for the soil absorption system.

ROAD REQUIREMENTS

The town Subdivision Bylaw and the Massachusetts approval not required (ANR) subdivision control laws apply when land is divided into two or more lots. Many of the town subdivision road requirements will conflict with restrictions and practicalities associated with construction on a dune and barrier beach. These include requirements for a paved road with paved sidewalks and, granite curbing or Cape Cod berm, and requirements for street trees. In addition, there is a 600-foot limit on dead-end streets. Another consideration is the 42' width requirement for a minor street (24' roadway, 3' berm, 4' grass, 5' sidewalk). The Planning Board has the authority to waive subdivision requirements. While it appears the subdivision requirements would apply if the lots are subdivided, it is also evident that the current road does not meet the subdivision requirements. Based on review of historic aerial maps, the road has not been paved since at least 1995.

DIMENSIONAL REQUIREMENTS

The properties are in a R3 residential zoning district, requiring 10,000 sq. ft. lots and widths of 100 feet. Setback requirements are 30 feet for the front yard, 20 feet for the rear yard, and 8 feet for side yards. Using the measuring tool available with town GIS suggests that the frontage is approximately 800 feet, if accurate allowing 8 lots, lot depth ranges from approximately 160 to 230 feet. The combined needs for roadway, wetlands buffer, and dimensional requirements, will need to be taken into account to assess lot availability.

RELOCATION RESOURCES

FEMA

A number of residents expressed interest in the possibility of receiving financial assistance through FEMA grant programs that support flood mitigation projects. FEMA funds a variety of flood mitigation strategies including home elevations, home relocations, and property buyouts. Funding is competitive and requires that local government sponsor and prioritize projects. Projects must also qualify based on a cost/benefit analysis that assures the long-term benefits of the project exceed the costs. The Town of Scituate has a robust program working with FEMA to elevate vulnerable structures.

FEMA does support projects that involve the voluntary relocation of an existing structure and the purchase of the underlying property with a deed-restriction for open space and/or protection of natural floodplain function. For these “Property Acquisition and Structure Relocation for Open Space” projects, allowable (reimbursable) costs include the market value of the land, relocating the structure, and reasonable site work. For most properties, FEMA pays 75% of allowable costs. Under the Flood Mitigation Assistance (FMA) program, Repetitive Loss properties may receive 90% reimbursement and Severe Repetitive Loss properties may receive 100% reimbursement. According to the latest guidance from FEMA,² to be eligible for funding, the property must be relocated outside of a Special Flood Hazard Area (1% chance flood zone). For that reason, as the relocated homes would still be located in the Velocity zone, they would not be eligible for FEMA relocation assistance.

Although not the focus of this project, residents would potentially be eligible for “Property Acquisition and Structure Demolition for Open Space” projects (buyouts). Such projects pay for the market value of the property (land and structures) and site restoration. As with relocation projects, FEMA pays 75% of allowable costs. Under the FMA program, Repetitive Loss properties may receive 90% reimbursement and Severe Repetitive Loss properties may receive 100% reimbursement. For relocation and acquisition projects, the cost share cannot come from the town or the state; typically, the homeowner pays the 10% to 25% match. A property that participates in this program would then have a deed restriction similar to the FEMA restrictions discussed previously.

OTHER POTENTIAL RESOURCES

Community Preservation Act: The Town of Scituate may want to explore whether to invest Community Preservation Act funds in purchasing homes for the purpose of creating open space. Such purchases are subject to Town Meeting approval. Purchase price is limited to the appraised value; a third party would need to hold a Conservation Restriction on the land. Community Preservation Act funds are apportioned between historic preservation, open space preservation,

² FEMA, Hazard Mitigation Assistance Guidance, February 27, 2015, p. 34

FEMA, Hazard Mitigation Assistance Guidance Addendum, February 27, 2015, p.20

and affordable housing. As Scituate Town Meeting recently committed Community Preservation Act funds to new athletic fields, a first step would be to ascertain the availability of future funds for open space purchases.

Commonwealth of Massachusetts: A \$30 million fund, proposed by Mass Audubon, is included in the current environmental bond bill. Its purpose is to facilitate buyouts of properties in coastal high-risk flooding areas. The properties would be preserved for open space, recreation and conservation. The proposal would allow grants to municipalities for land purchases. Inclusion in the environmental bond bill makes possible, but does not guarantee, funding. A potential next step is the creation of a commission, or some other mechanism, to develop the program requirements.

Local, regional and state governments have started developing funding mechanisms for relocation and/or buyout projects. While the examples below won't address an immediate need at Peggotty Beach, they may be worthy of review for this or future projects.

Austin, Minnesota: The city of 25,000 adopted a 20-year 0.5 cent sales tax to fund flood mitigation projects. A FEMA study from 2013 found the economic benefits to the city totaled 38.2 million and had an estimate return on investment of 165.3%. City funds combined with state and federal funding have resulted in more than \$24 million in mitigation projects.³

Des Moines, Iowa: Residents vote by a 70% margin to approve a 1% increase in the local sales tax to support flood hazard mitigation projects, in addition to property tax relief and other projects.⁴

Charlotte, North Carolina: The stormwater utility uses local fees for voluntary buyouts of flood-prone properties. They have purchased over 400 residential and commercial buildings, creating 185 acres of public open space.⁵

SEASONAL HOME ALTERNATIVE

A key challenge associated with relocating within Peggotty Beach is that the project would not remove the homes from vulnerability to coastal storms. While at higher elevation and more removed from wave action, the town property is in the same Velocity flood zone and floods during significant northeast storms. The risks will only increase as sea level rises. With that in mind, MAPC looked for alternatives to reestablishing permanent homes on Peggotty Beach that might still provide a summer residence option.

³ The Economist, Intelligence Unit, <https://floodeconomics.com/communities/austin-mn/> Retrieved 11/11/19

⁴ City of Des Moines, Iowa https://www.dsm.city/news_detail_T2_R88.php

⁵ City of Charlotte, NC, <https://charlottenc.gov/StormWater/Flooding/Pages/FloodplainBuyoutProgram.aspx> Retrieved 11/11/19

East Beach in Westport, MA is on a landform that is similar to Peggotty Beach. It is a barrier beach, in a Velocity flood zone, with ocean on one side, and salt marsh and a tidal river on the other. Prior to the Hurricane of 1938 East Beach supported a thriving cottage community. The community was nearly entirely wiped out and many people lost their lives in the storm. Since 1938 the beach has eroded considerably. The area sustained significant damage from Hurricane Bob in 1991. Homes that were on the beachfront in 1938 would today be located below mean high water.

Except for a handful of homes at the west end of the beach, the community today consists of seasonal mobile homes and trailers. Parcels are privately owned. Westport has a town bylaw specific to East Beach that allows residents to apply annually for a permit to place a recreational vehicle or mobile home on their property from May 1 through October 31. A few residents still have tight tanks or septic systems, but most have self-contained systems.

Self-contained systems would address one of the significant challenges of this project, that of permitting a waste disposal system. At East Beach, owners must have Board of Health certification and proof of off-site disposal arrangements. Residents use bottled water. In the event of emergency, residents must comply with orders from Emergency Management officials, the orders may include removal of items from the property.

Figure 5: East Beach aerial photo and properties, Westport, Massachusetts



Section 450.3 of the Scituate Zoning Bylaw prohibits occupation for living purposes of an “automotive type trailer or camper, whether mobile or immobile raised on cement block or

otherwise". Assuming this would apply to the types of mobile homes that might be utilized at Peggotty Beach, a two-thirds vote of Town Meeting would be required to amend the bylaw.

Peggotty Beach residents were asked about their interest in such an option. Some expressed willingness to entertain the concept, if only as a fallback option if relocating homes is not feasible. Others indicated they were not inclined toward, or definitely not interested in, a seasonal mobile home option. Specific concerns included the need to move the mobile home each year and to find off-season storage. Also mentioned was the concern that the changing landscape would require problematic regrading each year, and/or the installation of a cement pad which would be difficult to permit on the coastal dune.

FUTURE CONDITIONS

Flooding and erosion resulting from coastal storms, and projections for future sea level rise and the increasing intensity of storms are the impetus for this investigation, but these same conditions are another source of uncertainty about the feasibility of a land swap. Both residents and the Town will need to consider what current investments are prudent and desirable given future uncertainties. Analysis performed by Applied Coastal Research and Engineering, Inc. found erosion rates at Peggotty Beach of up to four feet per year since 1950.⁶ The report anticipates that the barrier beach will continue to erode and migrate landward into the salt marsh. Massachusetts sea level rise projections for 2060 range from 1.8 to 4.2 feet⁷ (4.2 feet is characterized as Extreme - the Maximum Physically Plausible). Recent years have seen upward revisions in the potential for future sea level rise from a variety of sources. The Town and the residents will have to make decisions without certain knowledge of the pace of future change, including when or whether extreme storms will alter the landscape dramatically.

For residents, their considerations may include the benefits of greater safety and extended tenancy vs. the cost of, and availability of financial support for, relocation; the uncertainty of success and length of time it may take to complete a land swap; the terms of a swap; as well as their own perceptions of how long the relocated homes will be viable. Additional future financial costs may also merit consideration. The homes, if moved, will still be located in the FEMA Velocity zone. While current residents likely have grandfathered flood insurance rates that protect them from paying actuarial rates, even grandfathered rates are on a steady upward trajectory. Congressional action to address the deficit in the National Flood Insurance Program through insurance rates that reflect damage experience have mostly been resisted, but pressure to address the deficits with rate adjustments will only increase in the future.

⁶ P. 9, Applied Coastal Research and Engineering, Inc., Coastal Erosion, Sediment Transport, and Prioritization Management Strategy Assessment for Shoreline Protection, Scituate MA, August 2016

⁷ P. 4-81, Commonwealth of Massachusetts, State Hazard Mitigation and Climate Adaptation Plan, 2018

The length of time it may take to complete a land swap may also be relevant for residents considering buyout alternatives. There is growing evidence that property values are declining in some locations vulnerable to coastal storms and sea level rise. In the most recent year, average assessments across Scituate were up 4%. For Town Way Extension properties, assessments decreased by an average of 3.5%

For the Town, benefits may include greater safety for the residents; reduced environmental impact from current home foundations and, potentially, septic systems; improved public access to the beach; and maintaining property tax income. Concerns may include the time commitment and potential financial costs associated with the land swap. The Town may need to consider the risks associated with making a further long-term commitment to the residents given that the homes will not be removed from the threat of current and future flooding. Another consideration is the town's capacity to maintain road and water services into the indefinite future. Perhaps another long-term consideration is whether the Town may have future needs to provide shore protection for inland properties, which might involve activities along the Peggotty Beach that would be incompatible with existing homes.

If the town does wish to pursue the land swap, one option that could address the challenge of maintaining services over the long-term, would be to investigate whether there are strategies that would limit the length of the tenancy of the homeowners based on storm damage, erosion rates, ability to maintain services, or other agreed upon measure. Such limitations could also affect homeowner interest and might have impacts on homeowner capacity to obtain mortgages on the properties.

DISCUSSION AND RECOMMENDATIONS

As is evident from the foregoing analysis, the challenges to completing a land swap along Town Way Extension are many and complex. The Town will no doubt need time to investigate and verify the challenges identified. Key issues include establishing ownership and boundaries for the town parcel, and the parcels needed for access; removing the town property from Article 97 protection; determining whether and where a road can be established and; resolving the many regulatory impediments. If the Town wishes to pursue further exploration of the feasibility of a swap, MAPC offers the following recommendations for next steps. While 1) below is a suggested first step, the order of other recommendations is not suggested by the presentation below.

- 1) Reach out to the Executive Office of Energy and Environmental Affairs to assess the likelihood of support for a change in Article 97 protection for the town property.

Feasibility of a land swap is contingent on the ability to receive legislative approval. Particularly since the EOEEA policy states that municipalities that propose, advocate, support, or complete disposition of Article 97 land without following the EOEEA policy will not be eligible for grants offered by EOEEA and its agencies, it will be important for the

Town to reach out early in the process of considering a change in the status of the town land.

- 2) Complete a title search and land survey of the town property (55-6-44) and the three relevant “owner unknown” properties. Establish property boundaries that can be located as the barrier beach shifts.

The title search will confirm the size of the property and acreage available for house lots. The title search will also clarify the status of the owner unknown properties. The land survey will clarify the location of the road and help to identify usable land (e.g. salt marsh extent). Finally, a title search can clarify the status of the “Mee” property. The terms of the transfer of the Mee portion of parcel 55-6-44 are unknown. If its use is not restricted to conservation and recreation, the Town could gain more flexibility on that portion of the property.

- 3) Clarify status and requirements for Town Way Extension.

If the town land is made available for a land swap, it appears Town Way Extension would need to be located within the footprint of that parcel, as the adjacent seaward land would be either be subject to new Article 97 protection, or existing FEMA deed restrictions. Typically, subdividing a lot where no road exists would need approval by the Planning Board under the Subdivision Bylaw. As noted previously, the town subdivision bylaw has many requirements that would not be feasible or permissible in this location. In this case, the road would likely be located roughly where it has currently been located since 2013, and in the unpaved state that has been the case for more than twenty years. The Town will need to clarify the status of the road and what requirements will apply in the event of a land swap.

Whether or not a land swap moves forward, MAPC recommends the Town take steps to address the status of Town Way Extension. This would include gaining formal permission to cross privately owned properties and formalizing the location and status of the road. Our research indicates that the road in its current configuration crosses private properties of known and unknown owners and appears to cross both the town property that is under Article 97 protection and at least one property with a FEMA deed restriction. As noted above, a title search and property survey will clarify these issues.

If a land swap does *not* move forward, the Town may need to address any conflicts with Article 97 restrictions. One option the town may want or need to consider is requesting permission from FEMA Region 1 to cross the deed restricted properties in order to provide access. MAPC believes the Town could make a case that when the deed restrictions were instituted it was known and understood that a roadway would continue to provide access to the remaining properties. To avoid the town property, it appears likely that the road would need to be relocated closer to the existing homes than is currently the case. The

road configurations are approximations drawn for illustrative purposes (see Figure 6). As stated above, if a land swap does move forward MAPC anticipates the road would move to the town property and avoid conflicts with FEMA deed restricted properties.

Figure 6: Possible Road Configuration if Needed to Avoid Article 97 Conflict



4) Evaluate prospects for addressing permitting requirements.

Both state and local regulations present barriers to the land swap. At the local level, in addition to road issues discussed above, the Scituate Flood Plain and Watershed Protection District prohibits new structures. Change to the bylaw would require a two-thirds vote of Town Meeting. The wetlands bylaw prohibits new septic systems on a barrier beach. Changes to Conservation Commission regulations would require a vote of the Conservation Commission. At the state level, Title V prohibits septic systems on a barrier beach except for replacement systems for structures existing in 1995. State and local wetlands regulations for coastal dunes set very high standards for construction on coastal

dunes. The standards require meeting protective conditions; they are not necessarily an absolute bar.

MAPC presumes that there will not be a change in the language of the state wetland and Title V regulations. Meeting Title V language appears to be the greater hurdle. Initial outreach to the MA Department of Environmental Protection (DEP) raised the question as to whether DEP would have regulatory authority, or inclination, to approve septic systems in the new location considering the unique circumstances. The Town of Scituate may wish to pursue further communication with DEP on the topic, although it may be difficult to obtain a definitive response absent an actual permit request.

The Town will need to assess whether there is support for the local zoning and bylaw changes that would be required. As with state regulations, the town could explore whether there would be greater receptivity to bylaw flexibility and/or zoning changes considering arguments that relocation would improve safety, lessen current storm damage and environmental impacts, and improve public access to the beach.

A possible alternative to a land swap might be to expand the size of current private properties onto the town land. The town would gain some form of conservation restriction on the portion of the land currently in private ownership and the residents would relocate to the town land. The theory is that this arrangement could allow the relocation of the homes to be treated as reconstruction or repair rather than new construction, thus addressing many of the most challenging regulatory issues. The portion of the property formerly occupied by the residents would be protected by a conservation restriction or other mechanism, rather than by transferring ownership to the town. MAPC recommends gaining feedback from the relevant permitting authorities, and EOEEA, in addition to thorough legal review to assure the viability of such a strategy.

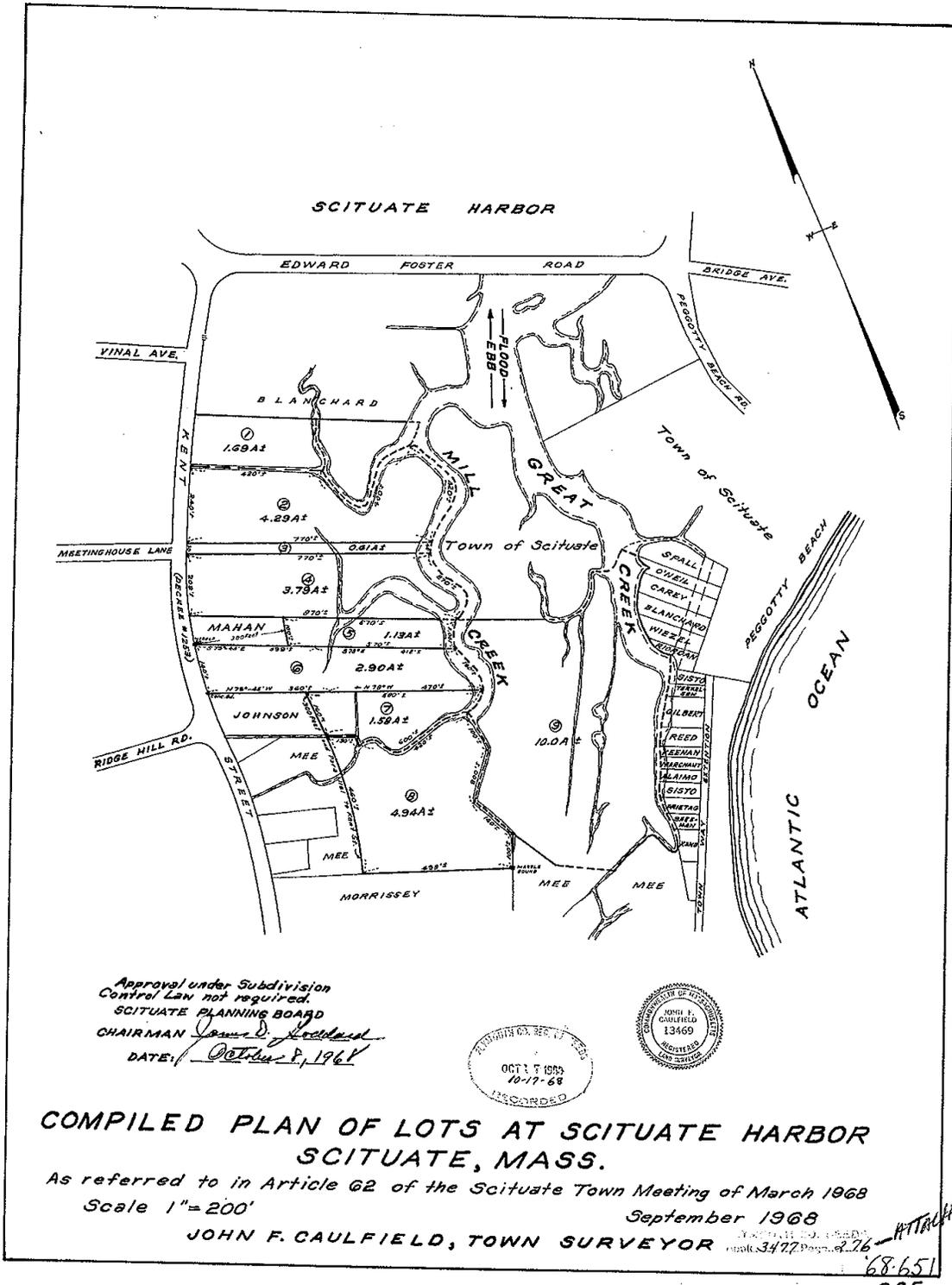
Other solutions may gain credence as the Town determines which obstacles may be insurmountable. For example, self-contained seasonal trailers could address septic issues. Term-limited permits for trailers might address future concerns that services will become impossible to maintain. Perhaps even unusual solutions such as off-site parking could be considered if road access cannot be provided.

5) Assess resident interest in moving forward.

Given the complexities and questions raised by this investigation, it will be unsurprising if Scituate officials and Town Way Extension residents lack certainty about their commitment to, and interest in, moving forward. Open and ongoing communication will be critical to success. Town Way Extension residents received a briefing before this report was complete. MAPC recommends the residents reconvene with town staff after both have had an opportunity to review the results of this feasibility study.

APPENDIX

Figure 6: Plan Associated with 1968 Town Meeting Vote



RESOURCES

Article 97 of the Amendments to the Massachusetts Constitution

<https://malegislature.gov/Laws/Constitution#amendmentArticleXCVII>

Commonwealth of Massachusetts, State Hazard Mitigation and Climate Adaptation Plan, 2018

<https://www.mass.gov/service-details/massachusetts-integrated-state-hazard-mitigation-and-climate-adaptation-plan>

Executive Office of Environmental Affairs, Article 97 Land Disposition Policy, February 19, 1998

https://www.mass.gov/files/documents/2018/06/06/article97_LandDisposition_Policy.pdf

Federal Emergency Management Agency, Hazard Mitigation Assistance Guidance, February 27, 2015.

https://www.fema.gov/media-library-data/1424983165449-38f5dfc69c0bd4ea8a161e8bb7b79553/HMA_Guidance_022715_508.pdf

Federal Emergency Management Agency, Hazard Mitigation Assistance Guidance Addendum, February 27, 2015.

https://www.fema.gov/media-library-data/1424983165449-38f5dfc69c0bd4ea8a161e8bb7b79553/HMA_Addendum_022715_508.pdf

Massachusetts Wetlands Protection Act Regulations, 310 CMR 10.00

<https://www.mass.gov/regulations/310-CMR-1000-wetlands-protection-act-regulations#current-regulations>

Massachusetts Septic System Regulations, 310 CMR 15.00 (Title 5)

<https://www.mass.gov/regulations/310-CMR-1500-septic-systems-title-5>

Town of Westport, Massachusetts Mobile Home/Recreational Vehicle Regulation Pertaining to the area known as “East Beach”.

<https://www.mass.gov/regulations/310-CMR-1500-septic-systems-title-5>